WHAT IS CLAIMED IS:

1. A digital watermark embedding method comprising:

acquiring embedding data to be embedded as a digital watermark;

forming packing data in which said embedding data is repeatedly connected

5   at least three times to be sequential without interval;

forming real embedding information in which a redundancy bit with a fixed length that is used for error correction of an information bit is added immediately after said information bit in which said packing data is subdivided into data each having a fixed length; and

10   embedding real embedding information into image data.

2. The digital watermark embedding method of Claim 1, further comprising encrypting said embedding data.

3. The digital watermark embedding method of Claim 1, further comprising interleaving said real embedding information, and thereafter is multiplexedly

15   embedding said real embedding information.

4. A digital watermark extracting method for extracting a digital watermark from image data concerned into which said digital watermark is embedded according to the digital watermark embedding method as set forth in Claim 1, the digital watermark extracting method comprising:

20   extracting real embedding information from said image data;

cutting real embedding information into code terms having a fixed length;

making an error correction of an information bit located at a front of the redundancy bit using a redundancy bit located at an end of this code term length, and thereby obtaining an information bit that has undergone error correction;

25   executing a majority decision for each corresponding bit of the obtained

information bit, and making an error correction by majority decision; and

treating said information bit that has undergone said error correction by said majority decision as data embedded in an image.

5. A recording medium for recording an image comprising:

means for acquiring embedding data to be embedded as a digital watermark;

means for embedding said digital watermark as real embedding information;

means for adding packing data in which said embedding data is repeatedly connected at least three times sequentially without interval;

means for adding a redundancy bit with a fixed length that is used for error correction of an information bit immediately after said information bit; and

means for subdividing said packing data into data each having a fixed length.

6. The recording medium of Claim 5, further comprising means for encrypting said embedding data.

7. The recording medium of Claim 5, further comprising means for interleaving said real embedding information, and thereafter multiplexedly embedding said real embedding information.

8. An image recording device comprising:

embedding data input means for acquiring embedding data to be embedded as a digital watermark;

packing data forming means for forming packing data in which said embedding data is repeatedly connected at least three times sequentially without interval;

redundancy bit addition means for forming real embedding information in which a redundancy bit with a fixed length that is used for error correction of an

information bit is added immediately after said information bit in which said packing data is subdivided into data each having a fixed length;

embedding means for embedding said real embedding information into image data concerned; and

output means for writing information onto a recording medium on the basis of said image data concerned in which said real embedding information is embedded.

9. The image recording device of Claim 8, further comprising means for encrypting said embedding data.

10. The recording medium of Claim 8, further comprising means for interleaving said real embedding information, and thereafter multiplexedly embedding said real embedding information.

11. The image recording device of Claim 8, further comprising image data input means for outputting said image data.

12. The image recording device of Claim 11, wherein said image data input means includes image pickup means.

13. An image replaying device comprising image signal output means for outputting an image signal on the basis of information read from a recording medium that records an image concerned in which a digital watermark is embedded as real embedding information, comprising:

means for acquiring said real embedding information containing embedding data to be embedded as a digital watermark is acquired;

means for repeatedly connecting packing data in which said embedding data is repeatedly connected at least three times sequentially without interval; and

means for adding a redundancy bit with a fixed length that is used for an error correction of an information bit immediately after said information bit in

which said packing data is subdivided into data each having a fixed length.

14. The image replaying device of Claim 13, further comprising means for encrypting said embedding data.

15. The recording medium of Claim 13, further comprising means for interleaving said real embedding information, and thereafter for multiplexedly embedding said real embedding information.

16. The image replaying device of Claim 13, further comprising a display device for making a display on the basis of an image signal output by said image signal output means.

17. The image replaying device of Claim 13, further comprising:

real embedding information detection means for extracting real embedding information embedded in information read from said recording medium on the basis of said information;

error correction means for making an error correction by said redundancy bit with respect to said real embedding information; and

majority decision means for executing a majority decision for each corresponding bit of said information bit with respect to said real embedding information that has been corrected by said error correction means, and making an error correction by said majority decision.

18. The image replaying device of Claim 17, further comprising:

error rate calculation means for calculating an error rate of image data concerned with reference to an error rate in said error correction by said redundancy bit and an error rate in said error correction by majority decision; and

falsification judgment means for comparing an error rate of image data concerned calculated by said error rate calculation means with a predetermined threshold, and, if the error rate of image data concerned exceeds said threshold,

judging that a falsification exists, and, if not, judging that no falsification exists.